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# Biotechnology Notes

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**Biotechnology Notes**, a compilation of agency activities, news events, and upcoming meetings, is prepared for members of the U.S. Department of Agriculture's (USDA) Committee on Biotechnology in Agriculture (CBA) by USDA's Office of Agricultural Biotechnology (OAB).

## INSIDE USDA

### **PUBLIC MEETINGS PLANNED FOR RESEARCH GUIDELINES**

USDA's Office of Agricultural Biotechnology (OAB) will sponsor four informal public meetings during September to discuss "USDA Research Guidelines for Assessing the Environmental Impact of Research Involving the Planned Introduction into the Environment of Organisms with Deliberately Modified Hereditary Traits" (the Guidelines). USDA research agencies would use the Guidelines to help assess possible effects on the environment prior to the approval of field tests involving organisms with deliberately modified hereditary traits. These assessments would fulfill requirements of the National Environmental Policy Act (NEPA) concerning biotechnology research.

The meeting schedule is as follows:

- Sept. 17: Sacramento, Calif. Capital Plaza Holiday Inn. Granada Room. 300 J St.
- Sept. 19: St. Louis, Mo. Sheraton St. Louis Hotel. Laclede Room. 910 N. 7th St.
- Sept. 21: Raleigh, N.C. North Raleigh Hilton. Salon F. 3415 Old Wake Forest Rd.
- Sept. 26: Washington, D.C. Aerospace Bldg. 901 D St., S.W. Conference room A, 10th floor.

All meetings begin at 9 a.m., except for the one in St. Louis, which starts at 8 a.m. and is repeated at 1:30 p.m. Although the meetings are primarily informal, an opportunity will be provided to make comments for the record. The public may submit written comments within 60 days of publication of the Guidelines in the Federal Register. The comments should be sent to Daniel Jones, Deputy Director, USDA-OAB, Room 321-A, Administration Bldg., 14th and Independence Ave., S.W., Washington, D.C. 20250. Anyone considering attending the meetings would be advised to re-confirm dates and locations with the OAB prior to making travel and lodging arrangements.

## TAKING THE BITE OUT OF RABIES

If biotechnology has its way, wildlife rabies may be brought under control. Researchers at the Wistar Institute of Philadelphia, Pa., have developed an experimental vaccine against rabies in raccoons and are now conducting a field test, under a permit issued by the Animal and Plant Health Inspection Service (APHIS), on Parramore Island, off the coast of Virginia. The vaccination phase of the year-long test began August 20 and lasted 10 days.

Genetic engineering was used to insert a rabies glycoprotein into a vaccinia virus. Bait containing the vaccine was scattered around the 7-mile long island. After ingesting the bait, the raccoons are expected to develop antibodies that prevent the virus from causing the disease.

Wistar is planning to follow-up this field trial with one conducted on the mainland. It will require further evaluation by APHIS before approval.

Outbreaks of rabies traced to raccoons have been occurring since 1982 in Virginia, Maryland, and Pennsylvania. The disease has recently spread to New Jersey and New York.

## CSRS PREPARING NEPA REGULATIONS

USDA's Cooperative State Research Service (CSRS) is writing regulations to ensure compliance with NEPA requirements. The proposed regulations will appear soon in the Federal Register for a 30-day public comment period.

NEPA sets out national policies and goals for protecting the human environment. It also directs Federal agencies to consider the environmental consequences of their decisions. This may involve preparation of an Environmental Assessment (EA), Environmental Impact Statement (EIS), or a written Finding of No Significant Impact (FONSI).

CSRS's proposed regulations encourage the person who prepares the EA (usually the principal investigator) to follow procedures and standards for safety described in the "USDA Research Guidelines for Assessing the Environmental Impact of Research Involving the Planned Introduction into the Environment of Organisms with Deliberately Modified Hereditary Traits," which should soon be published in the Federal Register. Council on Environmental Quality regulations require that all Federal agencies establish procedures to implement NEPA.

## NEXT ABRAC MEETING TO BE IN CHARLESTON, S.C.

The next meeting of USDA's Agricultural Biotechnology Research Advisory Committee (ABRAC) will be in Charleston, S.C., November 26-27. It is the first to be held outside of Washington, D.C., and



takes place at the Mills House Hotel (803-577-2400), Planters' Suite, Meeting and Queen Sts., Charleston, S.C. 29402. Like all previous ABRAC meetings, the public is invited to attend. It begins at 9 a.m. both days and adjourns at 5 p.m. on Nov. 26 and at 3 p.m. on Nov. 27. Topics to be discussed will appear in the October issue of Biotechnology Notes.

Those planning to attend should note that the International Conference on Biosafety is taking place Nov. 27-30 on nearby Kiawah Island, S.C. For more details, see news item "International Conference on Biosafety Planned" on page 4.

#### **WHAT'S HOT IN BIOTECH**

Members of USDA's Biotechnology Council met August 22 to brief each other on the latest policies, programs, and events affecting biotechnology at USDA. Some of the topics covered included USDA's research guidelines, the plant genome program, new economic studies, the state-Federal regulation issue, data bases, labeling issues, recent activities of the European Community, and bovine somatotropin.

The Council is chaired by OAB Director Alvin Young. Those who attended this meeting represented Agricultural Research Service (ARS), the Food Safety and Inspection Service, the CSRS, the Agricultural Marketing Service, the Foreign Agricultural Service, APHIS, and the Economic Research Service.

#### **CALLING ALL COMPUTER JOCKS**

USDA's National Agricultural Library (NAL) recently announced its 1990-1991 schedule of computer training classes for the AGRICOLA (Agricultural Online Access) and CRIS (Current Research Information System) information systems. The 1-day to 3-day classes can be taken in either Beltsville, Md. or Washington, D.C. Training is free to USDA and state land-grant personnel and to employees of other Federal, state, and local government agencies.

AGRICOLA is NAL's bibliographic database and covers worldwide journal literature and monographs on topics related to agriculture. The CRIS system handles publicly supported agricultural research in the United States. For more information on the AGRICOLA classes call 301-344-1204; or 301-344-3850 for CRIS classes.

#### **NEWS AROUND THE COUNTRY (AND THE WORLD)**

#### **NIH TO HOLD PUBLIC HEARINGS**

The National Institutes of Health (NIH), Bethesda, Md. will conduct seven regional meetings to discuss the current definition of

recombinant DNA used in the NIH Guidelines for Research Involving Recombinant DNA Molecules. A proposed new definition would encompass the newer gene transfer techniques such as electroporation, microinjection, transfection, and cell fusion. Other issues to be discussed include methods used to review and evaluate experiments and the role of Institutional Biosafety Committees.

The dates and locations of the meetings are: Sept. 13, Los Angeles, Calif; Sept. 14, Stanford, Calif.; Sept. 21, Chicago, Ill.; Sept. 27, Boston, Mass.; Sept. 28, New York, N.Y.; Oct. 4, Houston, Tex.; and Oct. 15, Bethesda, Md. For further details call 301-496-9838.

#### **BIOTECHNOLOGY COMES TO THAILAND**

The University of Maryland recently announced a new agreement with Thailand to help promote agricultural and economic development in that country through the use of biotechnology. Partners include the U.S. Agency for International Development, the Government of Thailand, the State of Maryland, and the University of Maryland System. The objective is to identify the needs of the agricultural and industrial sectors in Thailand for new biological technologies, and match those needs with Maryland biotechnology companies.

#### **INTERNATIONAL CONFERENCE ON BIOSAFETY PLANNED**

Over 200 field tests have been conducted around the world with genetically modified plants and microorganisms. To capture the biosafety data from these tests, scientists from about a dozen nations will gather on Kiawah Island, South Carolina, November 27-30, 1990 and discuss their biosafety findings.

The conference is entitled "The Biosafety Results of Field Tests of Genetically Modified Plants and Organisms," and sponsors include the Clemson University Agricultural Experiment Station, Clemson University College of Sciences, USDA's OAB and APHIS, the Garst Seed Company, Campbell Soup Company, and Monsanto Agricultural Products Company.

The meeting is earmarked for those with first-hand experience in field testing, and registration is limited to 200 people. For more information call Martha Steinbock, OAB, at 703-235-4415.

#### **BIOTECH BILL BEFORE CONGRESS**

It's called The Omnibus Biotechnology Act of 1990, or H.R. 5312, and it proposes to establish a uniform Federal system for review and approval of releases into the environment of genetically modified organisms. One section stipulates that no person may release a genetically modified organism into the environment for research and development or commercial purposes without a permit



from the appropriate Federal agency. The bill also calls for an Application Management Board chaired by senior officials from APHIS and the Environmental Protection Agency. All applications for environmental release permits would go before the Board, which forwards the application to the appropriate Federal agency.

### IN CASE YOU WEREN'T THERE

- Biotechnology and field testing was the highlight of the annual meeting of the American Society of Agronomy, North Central Branch, July 30-31, in Minneapolis, Minn. OAB Director Alvin Young led the session "Getting Biotech Into the Field," describing both the opportunities and the challenges of field testing plants and microorganisms. Maryln Cordle, OAB senior regulatory specialist, discussed the research and regulatory aspects of field tests, and David MacKenzie, director of USDA's National Biological Impact Assessment Program, covered the use of artificial intelligence to help comply with regulations and guidelines. Steven Burke of the North Carolina Biotechnology Center talked about public education issues, while Robert Thornburg of Iowa State University highlighted his experiences in field testing.

- "The International Telecommunications Symposium on Plant Biotechnology" was broadcast live by satellite August 18, featuring distinguished scientists from around the world. Two sets of panelists -- one gathered at Washington State University in Pullman and the other at the Max-Planck Institute for Genetics Research in Cologne, West Germany, discussed the most recent research developments and how biotechnology could benefit world food production, especially in developing nations. It was noted that while the 1980's was a decade of discovery for plant biotechnology, the 1990's will be the decade of development and implementation requiring more interaction among scientists around the world. Another panelist said biotechnology will benefit people in poor and rich countries alike because farmers won't need to change their traditional farm practices in order to reap the benefits of biotechnology. OAB Director Alvin Young was among the guests viewing the telecast. He noted this was "an exciting symposium that could serve as a model for more scientific symposia that use the advances now available through telecommunications."

### NEW PUBLICATIONS

- "Guidance for State Governments on Oversight of Biotechnology." Reviewed and edited by participants who attended the July 12-13, 1990 meeting in Sacramento, Calif. on "Special Workshop for State Agencies: Oversight of Biotechnology." To order copies call

either Norbert Martinez at 213-206-6814 or Roger Smith at 609-633-1314.

- "State-by-State Biotechnology Directory: Centers, Companies, and Contacts." Prepared by the Biotechnology Information Division of the North Carolina Biotechnology Center. Published by the Bureau of National Affairs, Inc. July 1990. \$60. To order call 1-800-372-1033.

- "Proceedings of the International Forum on Biotechnology entitled 'Harnessing World Benefits of Biotechnology'". The Forum was organized by BioResearch Ireland on June 5-6, under the auspices of the Irish Presidency of the European Community. It focused on the benefits of biotechnology to agriculture, food, health care, and environmental protection. ISBN-0-9516452-0-X. \$48 (includes air mail postage). To order write to BioResearch Ireland, EOLAS, Glasnevin, Dublin 9, Ireland.

#### UPCOMING MEETINGS

Sept. 12-13: Workshop on Biopesticide Registration Issues. Washington, D.C. Sponsored by the Industrial Biotechnology Association and the Environmental Protection Agency. Call 202-857-0244.

Sept. 17: USDA Public Meeting on the Research Guidelines. Sacramento, Calif. Capital Plaza Holiday Inn, Granada Room, 300 J Street. Call John Gerber, OAB, at 703-235-4418.

Sept. 17-20: AgTech '90. St. Louis, Mo. Sponsored by AgBiotechnology News. Call 319-277-3599.

Sept. 19: USDA Public Meeting on the Research Guidelines. St. Louis, Mo. Sheraton St. Louis Hotel, Laclede Room, 910 N. 7th St. Meeting arranged to coincide with the AgTech '90 conference being held in the same hotel. See calendar item directly above. Call John Gerber, OAB, at 703-235-4418.

Sept. 21: USDA Public Meeting on the Research Guidelines. Raleigh, N.C. North Raleigh Hilton, Salon F, 3415 Old Wake Forest Rd. Call John Gerber, OAB, at 703-235-4418.

Sept. 24-26: Third International Symposium on Biotechnology and Nutrition. University of Maryland, College Park, Md. Call 301-454-6056 or 301-344-3338.

Sept. 25-26: "The Development and Commercialization of Biotechnology." Seattle, Wash. Sponsored by the American Conference Institute. Call 416-926-8200.



Sept. 26: USDA Public Meeting on the Research Guidelines. Washington, D.C. Aerospace Building, 901 D Street, S.W., Conference Room A, 10th floor. Call John Gerber, OAB, at 703-235-4418.

Sept. 27: Second Annual Carolina Connection Biotechnology Show. Durham, N.C. Features include product exhibits and scientific speakers. Call Al Miller at 919-929-6212.

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Oct. 2-3: University/Industry Technology Transfer Conference. Toronto, Ontario, Canada. Sponsored by the University of Toronto and Canadian Chemical Producers Association. Call 615-366-0679.

Oct. 22-24: Anabiotech '90: Third International Symposium on Analytical Methods in Biotechnology. San Francisco, Calif. Sponsored by the American Chemical Society and the International Biotechnology Suppliers Association. Call 312-527-2011.

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Nov. 15-16: "Biotechnology and the Environment: Managing the Risks." Montreal, Quebec, Canada. Organized by the University of Quebec at Montreal. For details call Ms. Denyse Pronovost at 514-987--7944.

Nov. 26-27: Meeting of USDA's ABRAC. Charleston, S.C. Mills House Hotel, Planters' Suite, Second Floor, Meeting and Queen Streets. Open to the public. Call OAB at 202-447-9165.

Nov. 27-29: "Biotech USA '90". Conference and exhibition. Washington, D.C. For details write to Conference Management Corporation, 200 Connecticut Ave., Norwalk, Conn. 06854-9961.

Nov. 27-30: "The Biosafety Results of Field Tests of Genetically Modified Plants and Microorganisms." Kiawah Island, S.C. Call Martha Steinbock, USDA, at 703-235-4415.

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Biotechnology Notes is prepared by Marti Asner, public affairs specialist in USDA's Office of Agricultural Biotechnology. Suggestions for items to include in future issues are always appreciated and may be sent to USDA/OAB, Room 321-A, Administration Bldg., 14th and Independence Ave., S.W., Washington, D.C. 20250; or call 703-235-4416. The FAX number is 703-235-4429.

The Public is Invited to Attend Four Public Meetings  
on

*"USDA Research Guidelines for  
Assessing the Environmental  
Impact of Research Involving  
the Planned Introduction Into  
the Environment of Organisms  
with Deliberately Modified  
Hereditary Traits" (The  
Guidelines)*

Scheduled Meeting Places

<u>Sept. 17</u>	<u>Sept. 19</u>	<u>Sept. 21</u>	<u>Sept. 26</u>
Capital Plaza Holiday Inn	Sheraton St. Louis Hotel	North Raleigh Hilton	Aerospace Center
Granada Room	Laclede Room	Salon F Room	Conference Room A 10th Floor
300 J Street Sacramento, California	910 N 7th St. St. Louis, Missouri	3415 Old Wake Forest Road Raleigh, North Carolina	901 D St. S.W. Wash., D.C.

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All meetings begin at 9:00 a.m., except for the one in St. Louis, which starts at 8:00 a.m. and is repeated at 1:30 p.m. Although the meetings are primarily informal, an opportunity will be provided to make comments for the record. The public may submit written comments within 60 days of publication of the Guidelines in the Federal Register. The comments should be sent to:

Daniel D. Jones  
Deputy Director  
Office of Agricultural Biotechnology, USDA  
Room 321-A, Administration Building  
14th & Independence Avenue, S.W.  
Washington, D.C. 20250-2200

For further information call:

John Gerber  
Principal Scientist  
Office of Agricultural Biotechnology  
703/235-4418

**NOTE:** Anyone considering attending the meetings would be advised to re-confirm dates and locations with the OAB prior to making travel and lodging arrangements.